



The powerful spawning urge sends this pink salmon leaping up a waterfall in Alaska.



These salmon, cleaned and gutted, were taken by trollers. They are being processed on the Queen Charlotte Islands.

Binding arbitration will decide the boundaries between the new fishing zones in the Gulf of Maine and in offshore waters on Georges Bank. When each country extended its jurisdiction to 200 miles offshore, there was an overlap.

An equally-divided, fourteen-member Canada-United States East Coast Fisheries Commission will manage certain specified fish stocks. The agreement will assign each country the primary responsibility for management of certain species.

Canadians may fish for halibut off Alaska through the next two years but then will stop.

By an exchange of notes Americans will be permitted to continue to take ground fish off British Columbia for the same period and then stop.

The three treaties must be ratified by the US Senate before they come into effect.

### The Great Cross-Country Coho Salmon Run

The coho salmon of the Pacific coast have been moving east.

In the spring of 1966 Michigan tried to restock the Great Lakes with Atlantic salmon, but the young fish turned belly up as soon as they hit the water. It switched to the Pacific coho with immediate, extraordinary results. Canadian coho were planted in lakes Michigan, Huron and Superior. That fall, fishermen caught immature fish measuring 17 inches and weighing 2.5 pounds. The next year the province of Ontario introduced coho into Lake Ontario and Nipigon Bay in Lake Superior. They thrived and returned to spawn in 1970, averaging 25 inches and 5 pounds.

In the first nine months of 1970, US fishermen caught 700,000 pounds of salmon and Canadians began catching them in substantial quantities in Georgian Bay and Lake Erie. Everyone was delighted, at first; but the abundance brought out the worst in some anglers, and entire spawning runs were taken in some rivers. Fish were found to be carrying traces of DDT; and though DDT was later banned, others were discovered carrying PCB (polychlorinated biphenyl), a chemical used in industrial plants ringing the lakes, and Mirex, a compound known to cause cancer. Some officials



became concerned that the coho would contribute to the decline of the native lake fish.

More recently the coho have moved east toward the Atlantic and some have been taken in the St. Lawrence at Montreal. George Gruenfeld suggested in a recent *Atlantic Salmon Journal* article that the coho and the native Atlantic salmon may soon be locked in a competition for food and spawning space. He wrote: "The coho are considered to be a much more aggressive fish than the Atlantic salmon, which means that inevitably our native species will suffer, perhaps the mature salmon being crowded off the spawning beds entirely and their fry out-hustled in the search for food."

### Booby Hatch

Some early United States-Canadian experiments in artificial salmon hatching had disconcerting results. For several years some fish heading upstream in the Fraser system were stripped and the eggs hatched artificially. The results were measured against the results of natural spawning, and they proved to be the same. In either case, less than 0.3 per cent of the eggs produced adult fish. Artificial hatching was suspended, but in the 1970s, new methods of controlling the temperature and flow of water in both artificial hatcheries and spawning channels were developed. Canada now expects to double its salmon stocks by the 1990s.

### Dempster Highway

After 22 years of effort, at a cumulative cost of \$97 million, the government of the Yukon Territory has opened the 460-mile Dempster Highway. It begins 300 miles north of Whitehorse near Dawson City, stretches through virgin forest, climbs the Ogilvie Range, and moves north to the tundra above the tree line. At the halfway point there is a gas station and the Eagle Plains Hotel.

The road is made of gravel and would be called a highway only in the far north. The Yukon, which is four times the size of New York State, has 2,726 miles of road, only 119 miles of which are paved. The Dempster road has been built piecemeal over the last two decades. Hunting is banned along its entire length and for five miles on each side. The

effect of traffic on wildlife is being closely monitored, and the Yukon government has said that if the road proves adverse for migrating caribou, it may be closed down for periods or travellers may be required to travel in convoys. Dan Lang, the Yukon's Minister of Highways and Public Works, said his department will measure the environmental impact carefully, but the road is a vital addition to resource development. "We are in the twentieth century now, and we have to expand our economic base."

The road is named for W.J.D. Dempster, the Royal Canadian Mounted Police corporal who found a lost patrol in the area in 1911.